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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,817	11/24/2003	Abhay Sudhakarrao Kant	133918-1	5358

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EXAMINER	
LAU, TUNG S	

ART UNIT	PAPER NUMBER
2863	

DATE MAILED: 07/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/720,817	KANT ET AL.	
	Examiner	Art Unit	
	Tung S. Lau	2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 June 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4 and 51-61* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4 and 51-61* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3, 4, and 51-58 are rejected under 35 U.S.C. 102(e) as being anticipated by Barkhoudarian et al. (U.S. Patent Application Publication 2004/0060371).

Regarding claim 1:

Barkhoudarian discloses a system for detecting a rub in a turbomachine comprising: a turbomachine (page 2, section 0014-0015); sensors monitoring turbomachine conditions, and an on site monitor in communication with the sensors (page 2, section 0014-0015), and loaded with instructions to implement a method for detecting whether a rub is occurring in the turbomachine (page 4, section 0054, page 2, section 0015, fig.5a).

Regarding claim 3:

Barkhoudarian discloses a method for detecting a rub in a turbomachine, the method comprising: monitoring turbomachine conditions (page 2, section 0014-

0015), and determining whether a rub is occurring (page 4, section 0054, page 2, section 0015, fig.5a).

Regarding claim 4:

Barkhoudarian discloses a storage medium encoded with a machine-readable computer program code for detecting whether a rub is occurring in a turbomachine (page 2, section 0014-0015), the storage medium including instructions for causing a computer to implement a method (page 2, section 0014-0015, fig. 2, unit 54-60) comprising: obtaining data indicating turbomachine conditions (page 3, section 0050); and determining whether a rub is occurring (page 4, section 0054, page 2, section 0015, fig.5a).

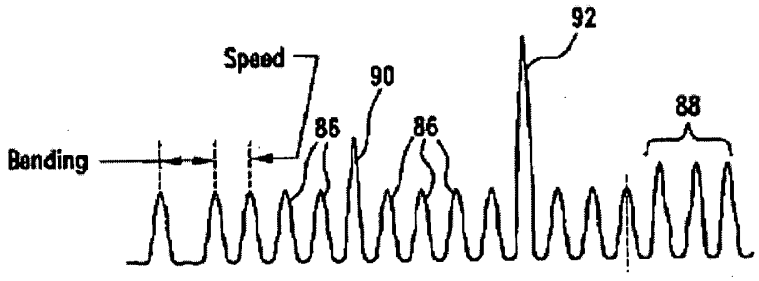

FIG. 5a

Regarding claim 51:

Barkhoudarian discloses a system, comprising: a turbomachine (fig. 2, page 2, section 0014-0015); means for monitoring turbomachine conditions (page 2, section 0014-0015), and means for detecting whether a nub is occurring in the turbomachine (page 4, section 0054, page 2, section 0015, fig.5a).

Regarding claim 52:

Barkhoudarian discloses a system, comprising: a plurality of turbomachine sensors (page 4, section 0056); and a nub detection system configured to monitor the plurality of turbomachine sensors and to detect a turbomachine rub event (page 4, section 0054, page 2, section 0015, fig.5a).

Regarding claim 54:

Barkhoudarian discloses a system, comprising: a rub detection system configured to monitor operational parameters of a turbomachine and to detect a turbomachine rub event (page 4, section 0054, page 2, section 0015, fig.5a).

Regarding claim 56:

Barkhoudarian discloses a method, comprising: analyzing turbomachine operational data to detect a rub event in the turbomachine (page 4, section 0054, page 2, section 0015, fig.5a).

Regarding claim 53, Barkhoudarian further discloses the plurality of turbomachine sensors are coupled to the turbomachine (page 4, section 0056).

Regarding claim 55, Barkhoudarian further discloses the rub detection system is coupled to the turrbomachine (page 4, section 0054, page 2, section 0015, fig.5a).

Regarding claim 57, Barkhoudarian further discloses monitoring a turbomachine to obtain the operational data (page 4, section 0054, page 2, section 0015, fig.5a).

Regarding claim 58, Barkhoudarian further discloses monitoring the turbomachine on-site (page 2, section 0014, fig. 5a).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

a. Claims 2 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barkhoudarian et al. (U.S. Patent Application Publication 2004/0060371) in view of Ghanime (U.S. Patent 6,591,296).

Barkhoudarian discloses a system including the subject matter discussed above except a server in communication with the on site monitor via an internet, and via a network. Ghanime discloses a server in communication with the on site monitor via an internet and via a network (Col. 1, Lines 34-61), in order to update machine data easily in a remote location (Col. 1, Lines 48-62).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Barkhoudarian to have the server in communication with the on site monitor via an internet and via a network taught by Ghanime, in order to update machine data easily in a remote location (Col. 1, Lines 48-62).

The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. I , 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Barkhoudarian and Ghanime are analogous art because they are from the same field of endeavor, detect condition of a turbo machine.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 60 and 61 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the

time the application was filed, had possession of the claimed invention. The description of substantially real time is not discloses clearly in the specification.

Claims 60 and 61 are rejected under 35 U.S.C. 112, second paragraph as it fails to particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The phrases 'substantial' were held to be indefinite because the specification lacked some standard for measuring the degree intended and, therefore, properly rejected as indefinite under 35 U.S.C. 112, second paragraph. *Ex parte Oetiker*, 23 USPQ2d 1641 (Bd. Pat. App. & Inter. 1992).

Note: the examiner is aware of the term "substantially" must be analyzed to determine whether this usage is definite or not to one in the field of invention (In *Verve, LLC v. Crane Cams, Inc.*, F.3d, App. No. 01-1417 (Fed. Cir. Nov. 14, 2002)(Newman, J.), *opinion below*, 145 F. Supp.2d 862, 60 USPQ2d 1219 (E.D. Mich. 2001), a panel of the Federal Circuit distinguishes *Amgen, Inc. v. Chugai Pharmaceutical Co.*, 927 F.2d 1200, 1218 (Fed. Cir. 1991)(Lourie, J.)), but in this case the term was never define by the applicant in the specification. An artisan doing measuring and testing would not know at what point " substantially real time " within the scope of the claim had been accomplished because nothing within the disclosure establishes when a sufficient substantially real time occurs.

Response to Arguments

4. Applicant's arguments filed 06/21/2006 with respect to the amended claims have been fully considered but they are not persuasive.

A. Applicant filed 37 CFR 1.131 try to overcome the prior art rejection. The declaration was not persuasive for the following reason:

1. The declaration was not sign properly by the inventors (see MPEP 715.04 [R-2]).

2. The evidence presented does not show the claim invention, for example: 1. The evidence show the vibration and rub detection, but it fails to shows the vibration and rub detection has anything to do with turbo machine. 2. The evidence does not show the machine is working (see # 3 below) in remotely monitoring the operational data via network (claim 59). 3. Reminds the applicants that the showing of facts shall be such, in character and weight, as to establish reduction to practice prior to the effective date of the reference, or conception of the invention prior to the effective date of the reference coupled with due diligence from prior to said date to a subsequent reduction to practice or to the filing of the application. Original exhibits of drawings or records, or photocopies thereof, must accompany and form part of the affidavit or declaration or their absence must be satisfactorily explained, the applicants fail to do so with the evidence presented on 06/21/2006. (see 37 CFR. § 1.131).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung S Lau whose telephone number is 571-272-2274. The examiner can normally be reached on M-F 9-5:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 571-272-2269. The fax phone numbers for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MICHAEL NGHIEM
PRIMARY EXAMINER

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